

PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 7

Complete if Known

Application Number	10/707,698
Filing Date	August 15, 2003
First Named Inventor	Williams et al.
Art Unit	3679
Examiner Name	E. Nicholson
Attorney Docket Number	22188/06727

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
VP		US- 388,522	08/1888	Beauchemin	
		US- 1,323,705	12/1919	Lynch	
		US- 1,874,284	08/1932	Goodall et al.	
		US- 2,150,042	03/1939	Shultz	
		US- 2,171,217	08/1939	Kreidel	
		US- 2,179,127	11/1939	Lauer	
		US- 2,182,811	12/1939	Kocher	
		US- 2,437,632	03/1948	Wolfram	
		US- 2,506,838	5/1950	Leonard	
		US- 2,251,717	08/1941	Parker	
		US- 2,330,841	10/1943	Parker	
		US- 2,344,032	03/1944	Eden	
		US- 5,183,322	02/1993	Haruch	
		US- 2,463,707	08/1949	Matousek	
		US- 2,484,815	10/1949	Crawford	
		US- 2,579,529	12/1951	Woodling	
VP		US- 2,641,487	06/1953	LaMarre	
		US- 2,687,315	08/1954	Courtot	
		US- 2,701,149	02/1955	Kreidel et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ *-Number ⁴ *-Kind Code ⁵ (if known)				
VP						
I		DE 2735477	02/1978	Sundholm		
I		DE 4041679	06/1992	Voss		
I		DE 4211498	10/1993	EM-Technik		
		DE 4219722	12/1993	Lehmann		
VP		DE 4238877	05/1994	Lehmann		

Examiner Signature	<i>Vishal Patel</i>	Date Considered	8/12/05
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Sheet 2 of 7**U. S. PATENT DOCUMENTS**

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VP		US- 5,351,998	10/1994	Behrens et al.	
		US- 2,744,651	05/1956	Bredstschneider	
		US- 2,749,152	06/1956	Courtot	
		US- 3,075,793	01/1963	Lennon et al.	
		US- 3,103,373	09/1963	Lennon et al.	
		US- 3,120,696	02/1964	Lubkin	
		US- 5,482,232	01/1996	Ohmi et al.	
		US- 5,882,050	03/1999	Williams et al.	
		US- 3,250,550	05/1966	Lyon	
		US- 3,275,350	09/1966	Kody	
		US- 3,290,069	12/1966	Davis	
		US- 5,934,714	08/1999	Sugiyama et al.	
		US- 3,336,058	08/1967	Franck	
		US- 6,073,976	06/2000	Schmidt et al.	
		US- 3,445,128	05/1969	Teeters	
VP		US- 3,484,123	12/1969	van der Velden	
		US- 3,584,900	06/1971	Lennon et al.	
		US- 6,131,963	10/2000	Williams et al.	
		US- 3,707,302	12/1972	Hiszpanski	

FOREIGN PATENT DOCUMENTS

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VP		DE 4304534	08/1994	Lehmann		
		EP 071678	02/1983	Deere & Co.		
		EP 223185	05/1987	Norbert		
		EP 484091	05/1992	Crawford		
		EP 489289	06/1992	Parker		
VP		EP 528079	02/1993	Aerogroup		

Examiner
Signature*Vincent P. Pelt*Date
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VP		US- 3,736,008	05/1973	Crawford	
		US- 3,787,080	01/1974	Daniel	
		US- 6,345,845	02/2002	Johnston	
		US- 3,970,337	07/1976	Niemeyer	
		US- 4,005,824	02/1977	Becker et al.	
		US- 4,037,864	07/1977	Anderson et al.	
		US- 6,629,708	10/2003	Williams et al.	
		US- 4,230,349	10/1980	Normark	
		US- 4,235,461	11/1980	Normark	
		US- 4,361,283	11/1982	Hetherington et al.	
		US- 2004/0113429	06/2004	Williams et al.	
		US- 5,083,749	01/1992	Linderman et al.	
		US- 4,702,420	10/1987	Rath	
		US- 4,826,218	05/1989	Zahuranec	
		US- 4,915,427	04/1990	Zahuranec	
		US- 4,995,646	02/1991	Johnston et al.	
		US- 5,027,489	07/1991	Johnston	
VP		US- 5,074,599	12/1991	Wirbel et al.	
		US-			

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VP		EP 1406039	04/2004	Swagelok		
		FR 757204	12/1933	Angelterre		
		FR 1092160	04/1955	Grande-Beaumont		
		FR 1170298	01/1959	St. Clair		
		GB 836002	06/1960	KAC Ltd.		
VP		GB 1130835	10/1968	Parker-Hannifin		

Examiner
Signature

Vishal Patel

Date
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VP		GB 2032555	05/1980	Olov Magnus		
		GB 2080900	02/1982	Waverly		
		JP 5079586	03/1993	Sekisui		
		JP 3079892	04/1991	Miura Yoshihisa		
		JP 3229090	10/1991	Riyouden Serv.		
VP		JP 7055073	03/1995	NTN Corp.		

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Date
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Application Number	10/707,698
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		Country Code ² Number ⁴ Kind Code ⁵ (# known)				
VP		JP 7110084	04/1995	Hitachi Metals		
		JP 8093975	04/1996	Hitachi Metals		
		JP 8145251	06/1996	Fuji Gokin		
		JP 8210567	08/1996	Hitachi Metals		
		NL 6710340	01/1968	Grassel		
VP		WO 89/09904	10/1989	Nords		

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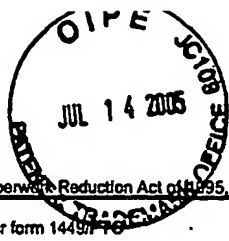
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VP		AU 110622	05/1940	Patex		
VP		CH 598530	04/1978	Begardhschopp		

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